

RAPIDLY CHANGING DICHROIC BEAMSPLITTER

ABSTRACT

An epi-fluorescent microscope is constructed with a quick changing set of filters. A wheel containing a plurality of dichroic beamsplitter mirrors mounted equidistance from a center axis of the wheel is mounted at a 45° angle within the lightpath and provides a beamsplitter function. Light from an excitation source is provided as monochromatic light, so that light from the excitation source is reflected by a selected one of the dichroic mirrors to the specimen, and Stokes shifted light from the specimen is transmitted through the dichroic mirror. By separately mounting the dichroic mirrors, the dichroic mirrors can be quickly moved and a quicker change of sensed fluorophores is achieved.

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